AMENDMENTS TO THE DRAWINGS:

Subject to the Examiner's approval, please replace FIGs. 1 and 4-5 with the attached substitute FIGs. 1 and 4-5.

REMARKS

Reconsideration of the present application is respectfully requested in view of the following remarks. Prior this response, claims 20-41 were pending in the application, of which claims 20, 31, 38, 39, 40, and 41 are independent. In the Office Action mailed April 22, 2005, claims 38, 39 and 41 were rejected under 35 U.S.C. § 102(b), and claims 20-37 and 40 were rejected under 35 U.S.C. § 103(a). Furthermore, the Examiner objected to FIGs. 1 and 4-5. Under this proposed response, claims 20-41 remain pending in this application. Applicant hereby addresses the Examiner's objections and rejections in turn.

I. Objection to the Drawings

In the Office Action, the Examiner objected to FIGs. 1 and 4-5 as containing improper cross-hatching. Subject to the approval of the Examiner, it is proposed to substitute FIGs. 1 and 4-5 with the attached substitute FIGs. 1 and 4-5. Applicant respectfully submits that substitute FIGs. 1 and 4-5 overcome this objection and add no new matter.

II. Rejection of the Claims Under 35 U.S.C. § 102(b)

In the Office Action, the Examiner rejected claims 38, 39 and 41 under 35 U.S.C. § 102(b) as being anticipated by European Patent No. 0341933 ("*Akiba*"). Claims 38, 39 and 41 have been amended, and Applicant respectfully submits that the amended claims overcome the Examiner's rejection.

In order for a reference to anticipate a claim, each and every element set forth in the claim must be found, either expressly or inherently, in the single prior art reference. MPEP 2131; *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed.

Cir. 1987). Claim 38 has been amended to recite that, among other things, "said water sensing wire comprises one or more reinforcement filaments radially internal with respect to said water permeable insulation." Support for this amendment is found in the specification at least at page 14, lines 16-25 and FIG. 1. Applicant notes that the Examiner, in regard to claim 23, pointed out that the water permeable insulation of *Akiba* (4, FIG. 1) contains braided polyester fabric, and that the polyester fabric is therefore "inside" the water permeable insulation. (4-22-05 OA, p. 5). However, Applicant respectfully asserts that the braided polyester fabric is clearly not radially internal with respect to the water permeable insulation, as it is the polyester fabric that comprises the water permeable insulation. Accordingly, *Akiba* does not teach that limitation of amended claim 38 and Applicant therefore requests that the rejection be withdrawn.

Claim 39 has been similarly amended to recite, among other things, "said water sensing wire comprising one or more reinforcement filaments radially internal with respect to said water permeable insulation." Because *Akiba* does not teach this feature, Applicant respectfully submits that the rejection of amended claim 39 is improper and requests that it be withdrawn.

Claim 41 has been amended to clarify that, among other things, "one or more reinforcement filaments are provided radially internal with respect to said water permeable insulation." Because *Akiba* does not teach one or more reinforcement filaments provided radially internal with respect to water permeable insulation, Applicant respectfully requests that the rejection of this claim be withdrawn.

III. Rejection of the Claims Under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected Claims 20-37 and 40 under 35 U.S.C. § 103(a) as being unpatentable over *Akiba* in view of alleged Applicant's Own Admission of Prior Art ("*AOAPA*"). Under U.S. patent law, if the Examiner's proposed modification of one prior art reference in light of the teachings of a second prior art reference would render the prior art invention unsatisfactory for its intended purpose, then no suggestion or motivation to make the proposed modification exists. MPEP 2143.01; *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). Because modifying the power cable of the *AOAPA* with the leakage sensor of *Akiba*, as the Examiner proposes, would render the water sensing wire taught by the *AOAPA* unsatisfactory for its intended purpose, the combination does not create a *prima facie* case of obviousness.

The *AOAPA* relied on by the Examiner, illustrated in FIGs. 4-6 of Applicant's specification, discloses a power cable comprising a water sensing wire located within a spirally-wound screen (FIGs. 4-5; p. 3, ll. 5-8, Applicant's spec.). A conducting band is wrapped around the screen (PSCB, FIG. 6, Applicant's spec.). The water sensing wire of the *AOAPA* comprises a solid conductor surrounded by an insulating layer. The two-component design of the water sensing wire minimizes its cross-sectional diameter, enabling the water sensing wire to protrude from the spirally-wound screen by only a minimal amount (FIG. 5, Applicant's spec.). By minimizing the protrusion of the water sensing wire from the screen, the *AOAPA* prevents the conducting band PSCB from placing undue pressure on the water sensing wire, particularly during application of radial stress on the power cable. This has the effect of increasing the life of the water

sensing wire by delaying the breakdown of the insulating layer surrounding the water sensing wire, preventing the water-sensing-wire conductor from contacting the conducting band PSCB and signaling a false alarm.

The leakage sensor of *Akiba*, however, cannot be combined with the power cable of the *AOAPA* to achieve the same lifetime-improving result. *Akiba* teaches a leakage sensor comprising a core conductor (1, FIG. 1 of *Akiba*), an insulating material (3, FIG. 1), an outer conductor (2, FIG. 1), and an outer protective covering (4, FIG. 1). The leakage sensor of *Akiba*, comprising twice as many components as the water sensing wire of the *AOAPA*, is necessarily greater in cross-section. Therefore, the leakage sensor of *Akiba* would protrude significantly from within the screen of the *AOAPA*, causing the conducting band PSCB to apply greater pressure to the leakage sensor. This would have the effect of shortening the leakage sensor's service life, as the insulation would break down more quickly, thereby allowing the conducting band to contact the outer conductor 2 sooner. Accordingly, combining the leakage sensor of *Akiba* with the power cable of the *AOAPA* would frustrate the technical objective achieved by the *AOAPA*.

Because the modification of the *AOAPA* with the leakage sensor of *Akiba* would render the water sensing wire of the *AOAPA* unsatisfactory for its intended purpose by shortening its service life, the combination of the *AOAPA* and *Akiba* cannot form a *prima facie* case of obviousness against claims 20-37 and 40. Applicant therefore requests that the Examiner withdraw the rejection of claim those claims.

IV. Conclusion

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 20-41 in condition for allowance. Applicant submits that the proposed amendments and issues raised herein do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner. Therefore, this Amendment should allow for immediate action by the Examiner.

Moreover, Applicant submits that the entry of the Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

In view of the foregoing remarks, Applicant submits that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: July 21, 2005

By: _____
Cortney S. Alexander
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